

WHAT I CLAIM IS:

1. A method of providing an essential oil extract of capsicum, wherein the extract contains capsaicinoid and terpene, said method including the steps of:

5 ~~providing~~, in powder form, capsicum from which seeds and stems have been removed;

mixing said capsicum with a solvent to dissolve at least some of the capsicum; and

10 during or after said mixing step, bringing a liquid solution of capsicum in said solvent to a temperature of $\leq 64^{\circ}\text{C}$ to significantly reduce the solvent content thereof and produce an essential oil extract that contains capsaicinoid and terpene.

2. A method according to claim 1, wherein said essential oil extract contains the naturally occurring capsaicinoid to terpene ratio.

15 3. A method according to claim 2, wherein said solvent is selected from the group consisting of hexane, pentane, butane, propane and other non-polar solvents having a boiling point of $\leq 64^{\circ}\text{C}$.

4. A method according to claim 3, wherein said solvent is pentane.

20 5. A method according to claim 2, wherein said step of providing capsicum in powder form comprises removing stems and seeds from capsicum pods and then grinding said pods.

6. A method according to claim 5, which includes the further step of removing fungus from said pods prior to grinding same.

7. A method according to claim 2, wherein said liquid solution is heated until the solvent content thereof is reduced to ≤1% by volume.

5 8. A method according to claim 7, wherein said liquid solution is heated for 1 to 16 hours.

9. A method according to claim 8, wherein said liquid solution is heated in a hot water bath.

10 10. A method according to claim 7, wherein said liquid solution is heated to a temperate of less than 60°C.

11. A method according to claim 2, wherein said liquid solution is brought to atmospheric pressure.

12. A method according to claim 2, which further includes the step of separating a liquid solution of capsicum in said solvent from any solid or non-dissolved material.

15 13. A method according to claim 2, wherein said step of separating comprises filtering to remove any solid or non-dissolved material.

20 14. A method of providing an essential oil extract of capsicum, wherein the extract contains capsaicinoid and terpene, said method including the steps of:

providing, in powder form, capsicum from which seeds and stems have been removed;

mixing said capsicum with pentane to dissolve at least some of the capsicum; and

5 during or after said mixing step, bringing a liquid solution of capsicum in said pentane to a temperature of $\leq 64^{\circ}\text{C}$ to significantly reduce the pentane content thereof and produce an essential oil extract that contains capsaicinoid and terpene, wherein said essential oil extract contains the naturally occurring capsaicinoid to terpene ratio.

15. A method of providing an essential oil extract of capsicum, wherein the extract contains capsaicinoid and terpene, said method including the steps of:

10 providing, in powder form, capsicum from which seeds
and stems have been removed;

mixing said capsicum with a solvent to dissolve at least some of the capsicum; and

15 during or after said mixing step, bringing a liquid solution of capsicum in said solvent to a temperature of $\leq 64^{\circ}\text{C}$ to
" significantly reduce the solvent content thereof and produce an
essential oil extract that contains capsaicinoid and terpene, wherein
said essential oil extract contains the naturally occurring capsaicinoid to
terpene ratio, and wherein said liquid solution is heated until the
solvent content thereof is reduced to $\leq 1\%$ by volume.

16. An essential oil extract of capsicum produced according to the method of claim 1, wherein said extract contains the naturally occurring capsaicinoid to terpene ratio.

17. An essential oil extract according to claim 15, wherein

said extract has a residual solvent content of \leq 1% by volume.